Docket No. 8005-1014 Appln. No. 10/757,426



AMENDMENTS TO THE CLAIMS:

This listing of the claims replaces all prior versions and listing of the claims in the present application.

Listing of Claims:

1. (currently amended) A mechanism for predicting a performance of a system constructed by a technique of combining that combines a plurality of software components, the system performance prediction mechanism based on software component performance measurements, comprising:

component performance measurement means for previously measuring system resource utilizations of individual software components constituting the system and storing them in a performance database;

transaction performance prediction means for predicting [[a]] system resource utilization of for a transaction to be processed by the system from a result of by searching a the performance database in consideration of the software components and requests constituting a processing content of the transaction; and

system performance prediction means for predicting a system resource utilization of \underline{for} the entire system by inputting the system resource utilization utilizations of \underline{the} each transaction predicted by the transaction performance prediction

means into a system performance prediction model that presents a system performance prediction,

wherein the system resource utilization measurements of the individual software components by said component performance measurement means are made by analyzing an event trace obtained by a measurement using both an application probe for detecting an event inserted in a test driver and occurring in a component to be measured and a kernel probe for detecting an event inserted in an operating system and occurring in a system to be measured.

- 2. (canceled)
- 3. (currently amended) The system performance prediction mechanism according to claim 1, wherein the system resource utilization measurements of the individual software components by said component performance measurement means are made by using a system resource utilization measuring function provided by basic software such as an operating system.
- 4. (currently amended) The system performance prediction mechanism according to claim 1, wherein the system resource utilization prediction of the entire system by said system performance prediction means is made by determining operating conditions, under which the software components operate, from the software components and requests constituting the processing content of the transaction to be processed by the system, determining system resource utilizations by searching the performance database using each software component and operating

conditions as keys, predicting the system resource utilization of the transaction by combining results of searching for the system resource utilizations of all software components involved in processing of a <u>each</u> transaction important in the system performance, and combining the obtained results and inputting them into the system performance prediction model.

- 5. (original) The system performance prediction mechanism according to claim 1, wherein the system resource utilization prediction of the entire system by said system performance prediction means is made by inputting the system resource utilizations predicted by said transaction performance prediction means with respect to individual transactions into the system performance prediction model together with a transaction execution ratio if there are plural types of transactions to be processed by the system and their execution ratio is previously defined as system design information.
- 6. (original) The system performance prediction mechanism according to claim 4, wherein the system resource utilization prediction of the entire system by said system performance prediction means is made by inputting the system resource utilizations predicted by said transaction performance prediction means with respect to individual transactions into the system performance prediction model together with a transaction execution ratio if there are plural types of transactions to be

processed by the system and their execution ratio is previously defined as system design information.

- 7. (original) The system performance prediction mechanism according to claim 1, wherein the system resource utilization is represented by CPU time.
 - 8. (canceled)
- 9. (original) The system performance prediction mechanism according to claim 3, wherein the system resource utilization is represented by CPU time.
- 10. (original) The system performance prediction mechanism according to claim 4, wherein the system resource utilization is represented by CPU time.
- 11. (original) The system performance prediction mechanism according to claim 5, wherein the system resource utilization is represented by CPU time.
- 12. (currently amended) A method of predicting a performance of a system constructed by a technique of combining that combines a plurality of software components, the system performance prediction method based on software component performance measurements, comprising the steps of:

previously measuring system resource utilizations of individual software components constituting the system and storing them in a performance database;

predicting [[a]] system resource utilization $\frac{1}{1}$ of $\frac{1}{1}$ transaction to be processed by the system $\frac{1}{1}$ from a result of by

searching a the performance database in consideration of the software components and requests constituting a processing content of the transaction; and

predicting a system resource utilization of <u>for</u> the entire system by inputting the predicted system resource <u>utilization</u> <u>utilizations</u> of <u>the each</u> transaction into a system performance prediction model <u>that presents a system performance</u> prediction,

wherein, in the step of measuring the system resource utilizations of the individual software components, the system resource utilizations of the individual software components are determined by analyzing an event trace obtained by a measurement using both of an application probe for detecting an event having been inserted in a test driver and occurred in a component to be measured and a kernel probe for detecting an event having been inserted in an operating system and occurred in a system to be measured.

13. (canceled)

14. (currently amended) The system performance prediction method according to claim 12, wherein, in the step of measuring the system resource utilizations of the individual software components, the system resource utilizations of the individual software components are determined by using a system resource utilization measuring function provided by basic software such as an operating system.

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15. (currently amended) The system performance prediction method according to claim 12, wherein, in the step of predicting the system resource utilization of the entire system, the system resource utilization of the entire system is predicted by determining operating conditions, under which the software components operate, from the software components and requests constituting the processing content of the transaction to be processed by the system, determining system resource utilization by searching a performance database using each software component and operating conditions as keys, predicting the system resource utilization of the transaction by combining results of searching for the system resource utilizations of all software components involved in processing of a each transaction important in the system performance, and combining the obtained results and inputting them into the system performance prediction model.

16. (original) The system performance prediction method according to claim 12, wherein, in the step of predicting the system resource utilization of the entire system, the system resource utilization of the entire system is predicted by inputting the system resource utilizations predicted by said transaction performance prediction means with respect to individual transactions into the system performance prediction model together with a transaction execution ratio if there are plural types of transactions to be processed by the system and

their execution ratio is previously defined as system design information.

- 17. (original) The system performance prediction method according to claim 15, wherein, in the step of predicting the system resource utilization of the entire system, the system resource utilization of the entire system is predicted by inputting the system resource utilizations predicted by said transaction performance prediction means with respect to individual transactions into the system performance prediction model together with a transaction execution ratio if there are plural types of transactions to be processed by the system and their execution ratio is previously defined as system design information.
- 18. (original) The system performance prediction method according to claim 12, wherein the system resource utilization is represented by CPU time.
 - 19. (canceled)
- 20. (original) The system performance prediction method according to claim 14, wherein the system resource utilization is represented by CPU time.
- 21. (original) The system performance prediction method according to claim 15, wherein the system resource utilization is represented by CPU time.

- 22. (original) The system performance prediction method according to claim 16, wherein the system resource utilization is represented by CPU time.
 - 23-31. (canceled)
 - 22. (second occurrence, canceled)
 - 33. (canceled)